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## **CLAIMS**

## 1. A compound of formula (I)

$$A - CO - B N - SO_2 - D$$
(I)

wherein:

A is a 5- or 6-membered monocyclic aromatic ring containing 1, 2 or 3 ring heteroatoms selected from nitrogen, oxygen and sulphur atoms and is unsubstituted or is substituted by 10 one, two or three atoms or groups selected from halo, oxo, carboxy, trifluoromethyl, cyano, amino, hydroxy, nitro, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxy, C<sub>1-4</sub>alkoxycarbonyl, C<sub>1-4</sub>alkylamino, di-C<sub>1-4</sub>alkylamino or aminoC<sub>1-4</sub>alkyl;

- the 1,4-phenylene ring of a compound of formula (I) is either unsubstituted or is substituted 15 by one or two substituents selected from halo, trifluoromethyl, trifluoromethoxy, cyano, nitro, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl and C<sub>2-4</sub>alkynyl, from the substituent -(CH<sub>2</sub>)<sub>n</sub> Y<sup>1</sup> wherein n is 0-4 and Y1 is selected from hydroxy, amino, carboxy, C1-4alkoxy, C2-4alkenyloxy, C2-4alkynyloxy, C<sub>1-4</sub>alkylamino, di-C<sub>1-4</sub>alkylamino, pyrrolidin-1-yl, piperidino, morpholino, thiomorpholino, 1-oxothiomorpholino, 1,1-dioxothiomorpholino, piperazin-1-yl, 4-C<sub>1-4</sub>alkylpiperazin-1-yl,
- 20 C<sub>1-4</sub>alkylthio, C<sub>1-4</sub>alkylsulphinyl, C<sub>1-4</sub>alkylsulphonyl, C<sub>2-4</sub>alkanoylamino, benzamido, C<sub>1-4</sub>alkylsulphonamido and phenylsulphonamido, from the substituent -(CH<sub>2</sub>)<sub>n</sub>Y<sup>2</sup> wherein n is 0-4 and Y2 is selected from carboxy, carbamoyl, C1-4alkoxycarbonyl, N-C1-4alkylcarbamoyl, N,N-di-C<sub>1-4</sub>alkylcarbamoyl, pyrrolidin-1-ylcarbonyl, piperidinocarbonyl, morpholinocarbonyl, thiomorpholinocarbonyl, 1-oxothiomorpholinocarbonyl,
- 25 1,1-dioxothiomorpholinocarbonyl, piperazin-1-ylcarbonyl, 4-C<sub>1-4</sub>alkylpiperazin-1-ylcarbonyl, C<sub>1-4</sub>alkylsulphonamidocarbonyl, phenylsulphonamidocarbonyl and benzylsulphonamidocarbonyl, from a substituent of the formula -X3-L2-Y2 wherein X3 is a group of the formula CON(R5), CON(L2-Y2), C(R5)2O, O, N(R5) or N(L2-Y2), L2 is

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C<sub>1-4</sub>alkylene, Y<sup>2</sup> has any of the meanings defined immediately hereinbefore and each R<sup>5</sup> is independently hydrogen or C<sub>1-4</sub>alkyl, and from a substituent of the formula -X<sup>3</sup>-L<sup>3</sup>-Y<sup>1</sup> wherein X<sup>3</sup> is a group of the formula CON(R<sup>5</sup>), CON(L<sup>3</sup>-Y<sup>1</sup>), C(R<sup>5</sup>)<sub>2</sub>O, O, N(R<sup>5</sup>) or N(L<sup>3</sup>-Y<sup>1</sup>), L<sup>3</sup> is C<sub>2-4</sub>alkylene, Y<sup>1</sup> has any of the meanings defined immediately hereinbefore and each R<sup>5</sup> is independently hydrogen or C<sub>1-4</sub>alkyl, and wherein any heterocyclic group in a substituent of the 1,4-phenylene ring of compounds of formula (I) optionally bears 1 or 2 substituents selected from carboxy, carbamoyl, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxycarbonyl, N-C<sub>1-4</sub>alkylcarbamoyl and N,N-di-C<sub>1-4</sub>alkylcarbamoyl, and wherein any phenyl group in a substituent of the 1,4-phenylene ring of compounds of formula (I) optionally bears 1 or 2 substituents selected from halo, trifluoromethyl, cyano, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, C<sub>2-4</sub>alkynyl, C<sub>1-4</sub>alkoxy, C<sub>2-4</sub>alkenyloxy and C<sub>2-4</sub>alkynyloxy;

B is CH or N;

- the heterocyclic ring containing B is either unsubstituted or is substituted by one or two substituents selected from hydroxy, oxo, carboxy and C<sub>1-4</sub>alkoxycarbonyl; or one of the following:
  - -(CH<sub>2</sub>)<sub>n</sub>-R, -(CH<sub>2</sub>)<sub>n</sub>-NRR<sup>1</sup>, -CO-R , -CO-NRR<sup>1</sup>, -(CH<sub>2</sub>)<sub>n</sub>-CO-R and -(CH<sub>2</sub>)<sub>n</sub>-CO-NRR<sup>1</sup>; wherein n is 0, 1 or 2, preferably n is 1 or 2;
- 20 R and R¹ are independently selected from hydrogen, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, C<sub>2-4</sub>alkynyl, hydroxyC<sub>1-4</sub>alkyl, carboxyC<sub>1-4</sub>alkyl and C<sub>1-4</sub>alkoxycarbonylC<sub>1-4</sub>alkyl or where possible R and R¹ may together form a 5- or 6-membered optionally substituted saturated or partially unsaturated heterocyclic ring which may include in addition to the nitrogen to which R and R¹ are attached 1 or 2 additional heteroatoms selected from nitrogen, oxygen and sulphur;

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- D is 2-indolyl, 2-benzimidazolyl, 2-benzo[b]furanyl, 2-pyrrolo[2,3-b]pyridyl, 2-furo[2,3-b]pyridyl or 6-7H-cyclopenta[b]pyridyl and is unsubstituted or is substituted by one, two or three substituents selected from halo, trifluromethyl, trifluromethoxy, cyano, hydroxy, oxo, amino, nitro, trifluromethylsulphonyl, carboxy, carbamoyl, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl,
- 30 C<sub>2-4</sub>alkynyl, C<sub>1-4</sub>alkoxy, C<sub>2-4</sub>alkenyloxy, C<sub>2-4</sub>alkynyloxy, C<sub>1-4</sub>alkylthio, C<sub>1-4</sub>alkylsulphinyl, C<sub>1-4</sub>alkylsulphonyl, C<sub>1-4</sub>alkylamino, di-C<sub>1-4</sub>alkylamino, C<sub>1-4</sub>alkoxycarbonyl,

N-C<sub>1-4</sub>alkylcarbamoyl, N,N-di-C<sub>1-4</sub>alkylcarbamoyl, C<sub>2-4</sub>alkanoyl, C<sub>2-4</sub>alkanoylamino, hydroxyC<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxyC<sub>1-4</sub>alkyl, carboxyC<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, N-C<sub>1-4</sub>alkyl, phenyl, heteroaryl, phenoxy, phenylthio, phenylsulphinyl, phenylsulphonyl, benzyl, benzoyl, heteroaryloxy, heteroarylthio, heteroarylsulphinyl and heteroarylsulphonyl, and wherein said heteroaryl substituent or the heteroaryl group in a heteroaryl-containing substituent is a 5- or 6-membered monocyclic heteroaryl ring containing up to 3 heteroatoms selected from nitrogen, oxygen and sulphur, and wherein said phenyl, heteroaryl, phenoxy, phenylthio, phenylsulphinyl, phenylsulphonyl, heteroaryloxy, heteroarylthio, heteroarylsulphinyl,
10 heteroarylsulphonyl, benzyl or benzoyl substituent optionally bears 1, 2 or 3 substituents selected from halo, trifluoromethyl, cyano, hydroxy, amino, nitro, carboxy, carbamoyl, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxy, C<sub>1-4</sub>alkylamino, di-C<sub>1-4</sub>alkylamino, C<sub>1-4</sub>alkoxycarbonyl, N-C<sub>1-4</sub>alkylcarbamoyl, N,N-di-C<sub>1-4</sub>alkylcarbamoyl and C<sub>2-4</sub> alkanoylamino; and excluding the compound 1-(5-chlorobenzofuran-2-ylsulphonyl)-4-[4-(4-pyridyl)benzoyl]
piperazine;

and pharmaceutically-acceptable salts thereof.

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- 2. A compound of formula (I) as claimed in claim 1 wherein A is a pyridyl, pyrimidinyl, imidazolyl or pyridazinyl ring.
- 3. A compound of formula (I) as claimed in claim 2 wherein A is 2-pyridyl, 3-pyridyl, 4-pyridyl 3-pyradazinyl, 4-pyridazinyl, 4-pyrimidinyl, 5-pyrimidinyl, 1-imidazolyl, 2-imidazolyl or 4-imidazolyl.
- 25 4. A compound of formula (I) as claimed in any claim from 1 to 3 wherein A is substituted by C<sub>1-4</sub>alkyl, amino and halo.
  - 5. A compound of formula (I) as claimed in any claim from 1 to 3 wherein A is unsubstituted.
  - 6. A compound of formula (I) as claimed in any claim from 1 to 5 wherein the

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- 1,4-phenylene ring is substituted by oxo, carboxy, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkoxycarbonyl.
- 7. A compound of formula (I) as claimed in any claim from 1 to 5 wherein the 1,4-phenylene ring is unsubstituted.
- 8. A compound of formula (I) as claimed in any claim from 1 to 7 wherein the heterocyclic ring containing B is substituted by oxo, carboxy, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkoxycarbonyl.
- 10 9. A compound of formula (I) as claimed in any claim from 1 to 7 wherein the heterocyclic ring containing B is unsubstituted.
  - 10. A compound of formula (I) as claimed in any claim from 1 to 9 wherein D is substituted by halo.
  - 11. A compound of formula (I) as claimed in any claim from 1 to 9 wherein D is substituted by bromo or chloro.
  - 12. A compound of formula (I) as claimed in claim 1 wherein:
- 20 A is pyridyl, pyrimidinyl, imidazolyl or pyridazinyl; B is N;
  - D is 2-indolyl or 2-benzo[b] furanyl both optionally substituted by fluoro, chloro or bromo; and pharmaceutically-acceptable salts thereof.
- 25 13. 1-(5-Chloroindol-2-ylsulphonyl)-4-[4-(4-pyridyl)benzoyl] piperazine or a pharmaceutically-acceptable salts thereof.
  - 14. 1-(5-Chloroindol-2-ylsulphonyl)-4-[4-(1-imidazolyl)benzoyl] piperazine or a pharmaceutically-acceptable salts thereof.

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- 15. A compound of formula (I), as defined in any claim from 1 to 14, or a pharmaceutically-acceptable salt thereof for use in medical therapy.
- 16. A pharmaceutical composition comprising a compound of formula (I), or a
  5 pharmaceutically-acceptable salt thereof, as defined in any claim from 1 to 14, with a pharmaceutically-acceptable diluent or carrier.
- 17. Use of a compound of formula (I), as defined in any claim from 1 to 14, or a pharmaceutically-acceptable salt thereof, in the preparation of a medicament for use in a 10 method of treating a Factor Xa mediated disease or condition.
  - 18. A method of treating a Factor Xa mediated disease or condition in a warm-blooded animal comprising administering an effective amount of a compound of formula (I), as defined in any claim from 1 to 14, or a pharmaceutically-acceptable salt thereof.